

What is claimed is:

1. A program information broadcasting system,
comprising the steps of :

5 preparing a master data of program information
for recognizing a broadcasting program with program
elements of said broadcasting program being divided into
a plurality of items and being turned to data at a
center;

10 preparing a program basic information with
minimal necessary items for preparation of a program
guide being extracted from said data constituting said
master data;

15 transmitting said master data and said program
basic information simultaneously with the broadcasting;
and

20 receiving, reproducing and displaying said
program basic information before completion of receipt
of said master data at a receiving terminal unit.

25 2. A program information broadcasting system
according to Claim 1, wherein said program basic
information is prepared by extracting information with
higher utilization frequency.

3. A program information broadcasting system

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according to Claim 1, wherein said program basic information is prepared by extracting data based on predetermined attributes from the master data of the program information.

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4. A program information broadcasting system according to Claim 3, wherein the attributes serving as basis for preparation of the program basic information are related to at least one of program category, 10 individual information or service provider.

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5. A program information broadcasting system according to Claim 4, wherein a plurality of types of program basic information are prepared as many as 15 related to said attributes.

6. A program information broadcasting system according to Claim 5, wherein said plurality of program basic information comprise data, which are prepared by 20 turning the attributes serving as basis for preparation of said program basic information to key code and are arranged in a summarized table, and data, which are prepared by arranging identification information of the program extracted using said attributes as basis in a 25 summarized table, whereby said data prepared by turning

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said attributes to key code and arranged in a summarized table are linked to said data prepared by arranging identification information in a summarized table.

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7. A program information broadcasting system
Claim 1
~~according to one of claims 1 to 6, wherein said master data and said program basic information are transmitted at cycles different from each other.~~

10 8. A program information broadcasting system according to Claim 7, wherein said master data are transmitted at longer cycle than said program basic information.

15 9. A program information broadcasting system
Claim 1
~~according to one of claims 1 to 8, wherein, in transmitting the program information, a program extended information is prepared by deleting the data used for preparation of the program basic information from the~~
20 master data, and the program basic information and the program extended information are linked to each other and are transmitted.

25 10. A program information broadcasting system according to Claim 1, wherein a mail is broadcast at the

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center in addition to transmission of the program information, and said mail is linked to said program information so that the receiving terminal unit can gain access to the link data of the program information from 5 the received mail.

11. A program information broadcasting system according to Claim 10, wherein data to call function to enable viewers to participate in voting, questionnaire, 10 etc. are incorporated in the mail to be transmitted.

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12. A program information broadcasting system according to Claim 11, wherein, in transmitting the mails, a summarized table of the mails is broadcast, and 15 it is checked at the receiving terminal unit whether the items listed in the summarized table of the mails have been already read or not, and only the mails not yet read are displayed.

20 13. A program information broadcasting system according to Claim 11, wherein, in transmitting the mails, the mail is transmitted together with some receiving condition, and it is checked at the receiving terminal unit whether the user of the terminal unit 25 satisfies said receiving condition or not, and the mail

is displayed only when the user satisfies the receiving condition.

14. A broadcasting device, comprising:

5 program information data preparing means for dividing program elements constituting a broadcasting program into a plurality of items and turning them to data and for preparing a master data of program information to recognize the program;

10 information retrieval means for retrieving minimal necessary items for preparation of a program guide from the master data;

transmission data generating means for converting said master data and said program basic information to

15 transmittable data; and

transmitting means for transmitting said transmission data.

15. A broadcasting device according to Claim 14,
20 wherein there are further provided mail data preparing means separately arranged from said program information data preparing means and used for preparing mail data, and transmission information data base means for integrating the program information data with the mail
25 data and sending to the transmission data generating

means.

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16. A broadcasting device according to Claim 15, wherein said transmission information data base means 5 sends the integrated data of the program information data and the mail data to the information retrieval means.

17. A broadcasting device ~~according to Claims 15 or 16~~, wherein there is further provided voting and questionnaire data preparing means for preparing voting and questionnaire data and for sending the data to the program information data preparing means.

18. A broadcasting device according to Claim 17, wherein said voting and questionnaire data preparing means sends the prepared voting and questionnaire data to the mail data preparing means.

19. A receiving terminal unit, comprising:
receiving means for receiving a master data of a broadcast program information;
program basic information preparing means for extracting minimal necessary items for preparation of a program guide from data, which constitute the received

master data, and for preparing a program basic information;

storage means for storing data of said program basic information;

5 data reproducing means for reproducing data of the received program information and the program basic information; and

control means for controlling various types of operations described above, whereby:

10 when an instruction to display the program information is inputted, said control means receives the master data of said program information, prepares a summarized table of the programs by reading the program basic information from said storage means.

15 20. A receiving terminal unit according to Claim 19, wherein said program basic information is prepared by extracting information with higher utilization frequency.

20 21. A receiving terminal unit according to Claim 19, wherein said program basic information is prepared by extracting data based on predetermined attributes from the master data of the program information.

25 22. A receiving terminal unit according to Claim 21,

wherein said attributes serving as basis for preparation of the program basic information are related to at least one of program category, individual information or service provider.

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23. A receiving terminal unit according to Claim 22, wherein said plurality of types of program basic information are prepared as many as related to said attributes.

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24. A receiving terminal unit according to Claim 23, wherein said plurality of program basic information comprise data, which are prepared by turning the attributes serving as basis for preparation of said program basic information to key code and are arranged in a summarized table and data prepared by arranging identification information of the program extracted using said attributes as basis in a summarized table, and said data prepared by turning said attributes to key code and arranged in a summarized table are linked to the data prepared by arranging the identification information in a summarized table.

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